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## Review of the Southern South American Spider Genus *Platnickia* (Araneae, Zodariidae)

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### ABSTRACT

Although only two species have been assigned to the temperate South American zodariid genus *Platnickia* Jocqué, the fauna is actually more diverse. The type species, *P. elegans* (Nicolet), is widespread in Chile, from Coquimbo south to Chiloé, and in adjacent Argentina, whereas *P. bergi* (Simon) is known only from the far southern tip of the continent: Magallanes in Chile, Tierra del Fuego in Argentina, and the Falkland Islands. Both species are redescribed on the basis of newly collected material. Three new species are described: *P. roble* from Ñuble, Chile; *P. wedalen*, found in southern Chile, from Cautín to Aisén, as well as adjacent Argentina and the Falkland Islands, and *P. bolson*, known only from Llanquihue, Chile, and Río Negro, Argentina.

### INTRODUCTION

The family Zodariidae comprises cursorial hunting spiders of varying size, anatomy, and habits; the family has an almost cosmopolitan distribution, but is most diverse in tropical and subtropical areas. The main diagnostic features are the absence of a serrula on the palpal endites, the elongated anterior lateral spinnerets (always larger than the posterior medians and posterior laterals), and (except

for *Cyrioctea* Simon) a lateral implantation of the teeth on the tarsal claws (Jocqué, 1991). During its taxonomic history, the group has been poorly defined, but the generic revision of Jocqué (1991) provided the starting point for all subsequent studies, which have dealt mostly with the highly diverse African and Australian faunas (see Dippenaar-Schoeman and Jocqué, 1997; Jocqué and Baehr, 1992; Baehr, 2004; Jocqué and Dippenaar-Schoeman, 2006).

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Figs. 1–3. *Platnickia elegans* (Nicolet), living specimens. 1. Male from Nahuelbuta. 2. Female from Alto Caledonia, with egg sac, in armpits of colihue bamboo (*Chusquea culeou*). 3. Same, detail (photographs by Martín J. Ramírez).

Although the Neotropical fauna has been considered less diverse, recent revisions of the genera *Tenedos* O. P.-Cambridge and *Ishania* Chamberlin (Jocqué and Baert, 1996, 2002) and the descriptions of two new genera, *Epicratinus* and *Colima*, by Jocqué and Baert (2005) show that the Neotropical forest zodariid fauna is both unusual and diverse.

In the central and southern parts of South America, though, only four genera are known to date, each represented by only a few species: *Cyrioctea*, *Leprolochus* Simon, *Cybaeodamus* Mello-Leitão, and *Platnickia* Jocqué. The only other taxa known from this region are two species described in *Storena* Walckenaer (a genus in which early arachnologists placed many species from different parts of the world, but which is now considered to be restricted to Australia). The southern South American taxa still listed in *Storena* are *S. lebruni* Simon (1886) and *S. lentiginosa* Simon (1905). The type of the former seems to be lost, but the type of the second species is certainly a juvenile *Cybaeodamus* (as indicated by Jocqué, 1991: 50).

The genus *Platnickia* was erected by Jocqué (1991) for *Drassus elegans* Nicolet (and its synonym *D. similis* Nicolet) and *Storena bergi* Simon, from the temperate and cold forests of Chile and Argentina (figs. 1–3). The spiders assigned to this genus are recognized by the

high carapace with a cluster of hairs in front of the fovea, and by the male palp, which has a forwardly directed tegular extension (conductor?) and a simple, elongate tegular (median?) apophysis (Jocqué, 1991: 75).

Study of available museum collections indicates that the genus is actually more diverse; three new species are described here, from southern Chile, Argentina, and the Falkland Islands. Specimens have been examined from the collections of the American Museum of Natural History (AMNH), California Academy of Sciences (CAS), Museo Argentino de Ciencias Naturales “Bernardino Rivadavia” (MACN), Muséum National d’Histoire Naturelle, Paris (MNHN), and Museo Nacional de Historia Natural, Santiago (MNHNS).

The format of the descriptions largely follows Platnick (1986). The descriptions of external morphological features are based on single specimens; variation is discussed separately. Line drawings of the internal female genitalia were made with a camera lucida on an Olympus BH-2 compound microscope. Photographs of preserved specimens were taken with a Nikon DXM1200 digital camera mounted on a Nikon SMZ1500 stereomicroscope. All measurements are in millimeters. The leg spination notation is standard for Araneae where possible; for example, vp0-0-0-

1-1 refers to two consecutive distal spines on the proventral surface of a given podomere divided in fifths, counting from proximal to distal; for the ventral surfaces (especially on tibiae), if the arrangement is symmetrical the spines are noted as pairs (i.e., v2-2-2-2), but if not symmetrical, the surface is divided into vp and vr and noted independently (i.e., vp0-0-1-1-1, vr1-1-1-1-1). If differences were found between the same podomere of both sides, a slash is used, for example: p1-1-1/0, meaning three spines on the prolateral face, but the distal one is absent on the opposite leg (special arrangements or distributions are noted in the text). Abbreviations are standard for the Araneae.

Some specimens were reared to maturity in the laboratory. For this, glass cylindrical containers (diameter ca. 25 mm, length ca. 80 mm) were used; house flies (*Musca domestica*) were given as food, and water was embedded in a piece of cotton.

### *Platnickia* Jocqué

*Platnickia* Jocqué, 1991: 75 (type species by original designation *Drassus elegans* Nicolet).

**DIAGNOSIS:** As per Jocqué (1991). Males of this genus have a relatively elongated tegulum with a long, slender, and simple tegular apophysis (sometimes membranous and unsclerotized); the embolus has a mesoprolateral origin, and its tip is hidden by the massive apical tegular extension (figs. 6, 7). The retrolateral tibial apophysis is short, sometimes inconspicuous, but bears modified setae (figs. 4, 5). The epigynum has a variable-shaped median field (figs. 13, 14, 23, 56, 58, 63, 68, 73). The two large spermathecae (figs. 15–18, 24, 57, 59, 64, 69, 74) have internally directed heads with a porous surface; a large dictynoid pore is present at the anteromedian corner of their base (figs. 17, 18). No scopulae or modified hairs were found on the legs of the specimens examined (fig. 8). The tarsal trichobothrial bases bear a single ridge (fig. 75) and the tarsal organ is capsulate (fig. 76). The teeth on the paired tarsal claws originate on the median, rather than ventral, surface of the claws (figs. 77, 78).

**DESCRIPTION:** A detailed description has already been provided by Jocqué (1991).

**DISTRIBUTION:** Known only from Chile, Argentina, and the Falkland Islands.

### KEY TO SPECIES OF *PLATNICKIA*

1. Females. . . . . 2
  - Males (those of *P. roble* unknown). . . . . 6
2. Epigynum with a short, transverse median field (fig. 58); spermathecae simple, rounded (fig. 59) . . . . . *roble*
  - Epigynum with a larger median field, not transverse; spermathecae bilobed. . . . . 3
3. Median lobes of spermathecae smaller than lateral lobes; median field of epigynum shallow, with lateral margins obsolete . . . 4
  - Median lobes of spermathecae larger than lateral lobes or similar in size to them; median field of epigynum depressed, with well-defined lateral margins . . . . . 5
4. Margins of median field of epigynum obsolete, defining a square, copulatory openings widely spaced (fig. 56); copulatory ducts short (fig. 57) . . . . . *elegans*
  - Margins of median field of epigynum conspicuous, defining a shallow depression, more or less rectangular, with rounded anterolateral corners, copulatory opening closely spaced (fig. 73); copulatory ducts long, thick (fig. 74) . . . . . *bolson*
5. Median field of epigynum more or less trapezoidal, widest anteriorly (fig. 68); both lobes of spermathecae similar in size, more or less consecutive (fig. 69); leg spines normal . . . . . *bergi*
  - Median field of epigynum almost heart-shaped, with rounded anterolateral margins (fig. 63); spermathecal lobes situated side by side, median ones extending anteriorly (fig. 64); leg spines reduced . . . . . *wedalen*
6. Palp with tegular apophysis well sclerotized . . 7
  - Palp with tegular apophysis unsclerotized . . 8
7. Tegular apophysis and tegular extension proportionately thick and short; retrolateral tibial apophysis short (figs. 52–54) . . . . . *elegans*
  - Tegular apophysis proportionately longer, more sinuous; tegular extension also more elongated; retrolateral tibial apophysis more acute, projecting (figs. 70–72) . . . . . *bolson*
8. Tegular apophysis short, ventrally directed, separated from the ventral surface of the tegular extension; retrolateral tibial apophysis truncated (figs. 65–67); leg spines normal . . . . . *bergi*



Figs. 4–8. *Platnickia elegans* (Nicolet). 4–7. Male from Pucará. 8, Male from Palmas de Ocoa. **4.** Left palp, retrolateral view (bulb dissected). **5.** Same, detail of retrolateral tibial apophysis. **6.** Left bulb, ventral view. **7.** Same, detail of apical structures, prolateral view. **8.** Right leg III, oblique dorsal view.

- Tegular apophysis slightly longer, running nearly parallel to the ventral surface of the tegular extension, which has a dorsal denticulate keel; retrolateral tibial apophysis with very acute tip (figs. 60–62); leg spines reduced . . . . . *wedalen*

*Platnickia elegans* (Nicolet)

Figures 1–26, 34–37, 52–57, 75–78

*Drassus elegans* Nicolet, 1849: 455, pl. 4, fig. 3, 3a–d (female lectotype from Valdivia or San Carlos de Chiloé, Chile, in MNHN, designated by Jocqué, 1991: 76, examined).

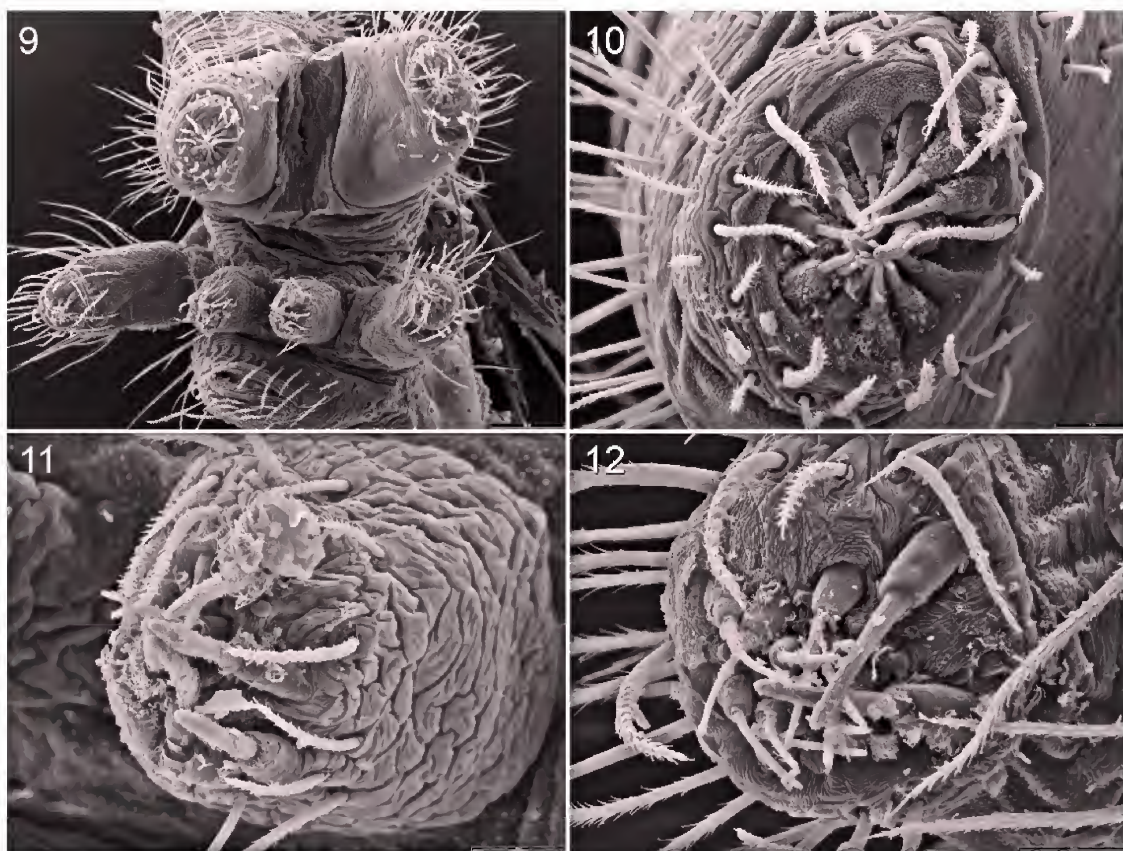
*Drassus similis* Nicolet, 1849: 456 (female holotype from Valdivia, Chile, in MNHN, examined by Jocqué, 1991: 78). First synonymized by Simon, 1889: 218.

*Storena elegans*: Simon, 1889: 218.

*Platnickia elegans*: Jocqué, 1991: 75, figs. 37, 151–160.

**DIAGNOSIS:** Males resemble those of *P. bolson* in having a well-sclerotized tegular apophysis (figs. 6, 7, 52–54), but differ in having the tegular apophysis thicker, slightly shorter, and less sinuous, and by the tegular extension, which is proportionately shorter and broader; the retrolateral tibial apophysis is also less acute. Females can be distinguished by the squared-shaped median field of the epigynum (fig. 56) and by the longer internal spermathecal heads (fig. 57).

**DESCRIPTION:** Male (Nahuelbuta; figs. 25, 34, 35): Total length 4.68. Carapace 2.40 long, 1.52 wide. Femur II 1.40 long. Eye sizes and

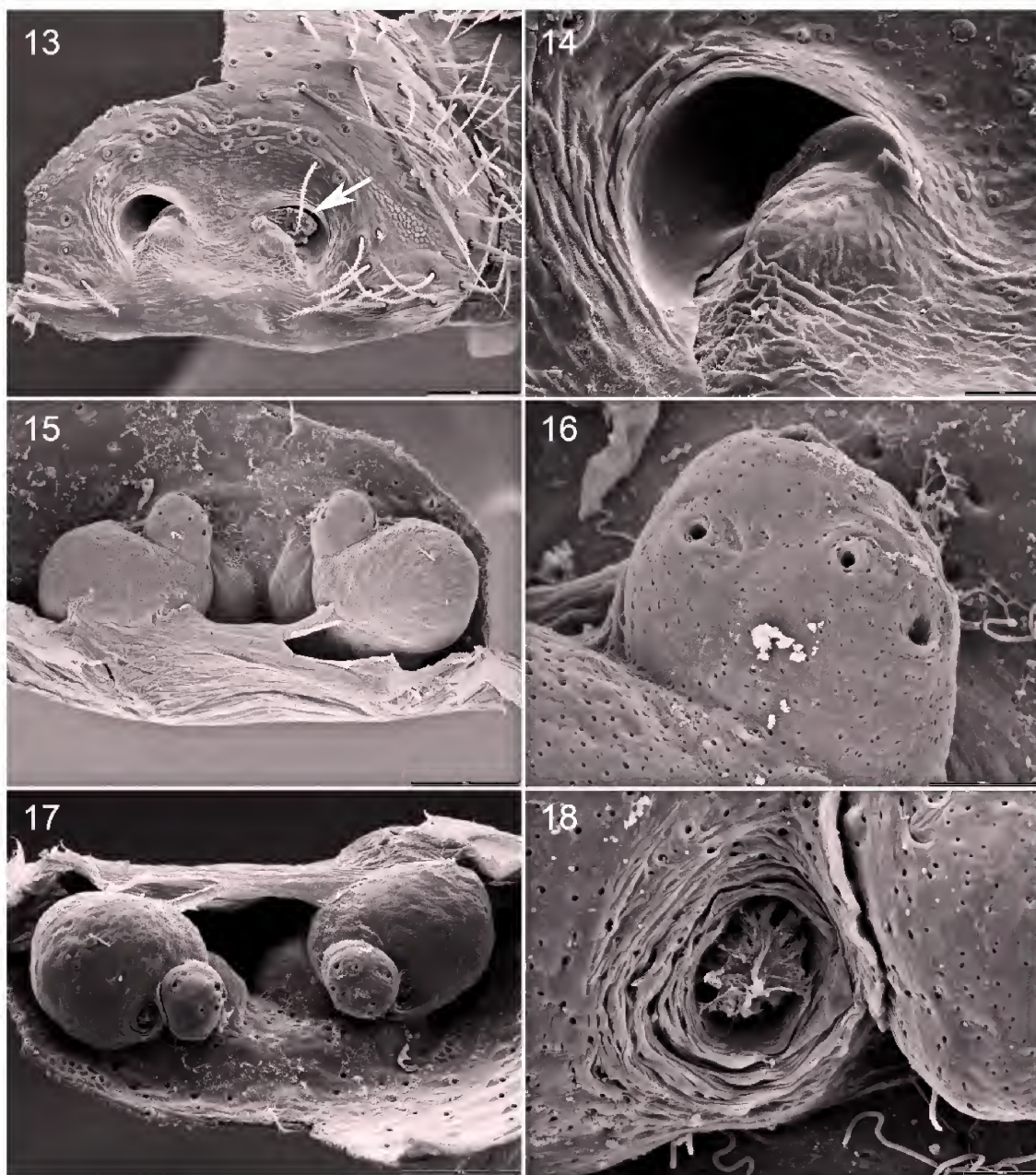


Figs. 9–12. *Platnickia elegans* (Nicolet), female from Palmas de Ocoa. **9.** Spinnerets, ventral view. **10.** Anterior lateral spinneret, apical view. **11.** Posterior median spinneret, apical view. **12.** Posterior lateral spinneret, apical view.

interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.04, AME-ALE 0.06, PME-PME 0.08, PME-PLE 0.18, ALE-PLE 0.06. Carapace, femora, patellae dark brown, lighter on proximal parts of femora III, IV, dorsal parts of patellae; remaining podomeres yellowish, except for darkened distal rings on tibiae III, IV; coxae ventrally pale yellowish; mouthparts, palps dark brown; sternum brown with leaf-shaped, lighter central area; abdominal dorsum whitish, with black cardiac mark, series of short lateral transverse stripes on both sides, fused medially near caudal area as chevrons; sides blackish, venter also blackish, flanked by two whitish bands; pre-epigastric area purplish brown; spinnerets brown. Leg spination: femora: I d1-1-1 (last one very thin), p1(subap), l(ap); II d1-1-1, p1(subap), l(ap); III d0-1-1, dp0-0-1-1, dr0-0-1-1-1; IV d1-1-1, dp0-0-2/1, dr0-0-1/0;

tibiae: I p1-1, vp1(ap); II vr1-1-1, vp0-0-1; III v2-2-2, p1-1, r1-1; IV v2-2-2, r1-1; metatarsi: I v(ap)2, r(ap)1, p(ap)1; II v0-1-1, r(ap)1, p(ap)1; III v1-2-2, p1(ap), r1(ap), dp1(ap), dr1(ap); IV v1-1-2, p0-1-0-1-1, r1(ap), dr0-1-1; tarsi: III vr0-0-1-1, vp0-0-1; IV vr0-0-1-1, vp1(subap). Palp (figs. 4–7, 52–55): retrolateral tibial apophysis inconspicuous, with cluster of modified hairs; tegular apophysis well sclerotized, relatively sinuous; tegular extension massive, longitudinal, with dorsal fold where embolus fits in resting position (fig. 7).

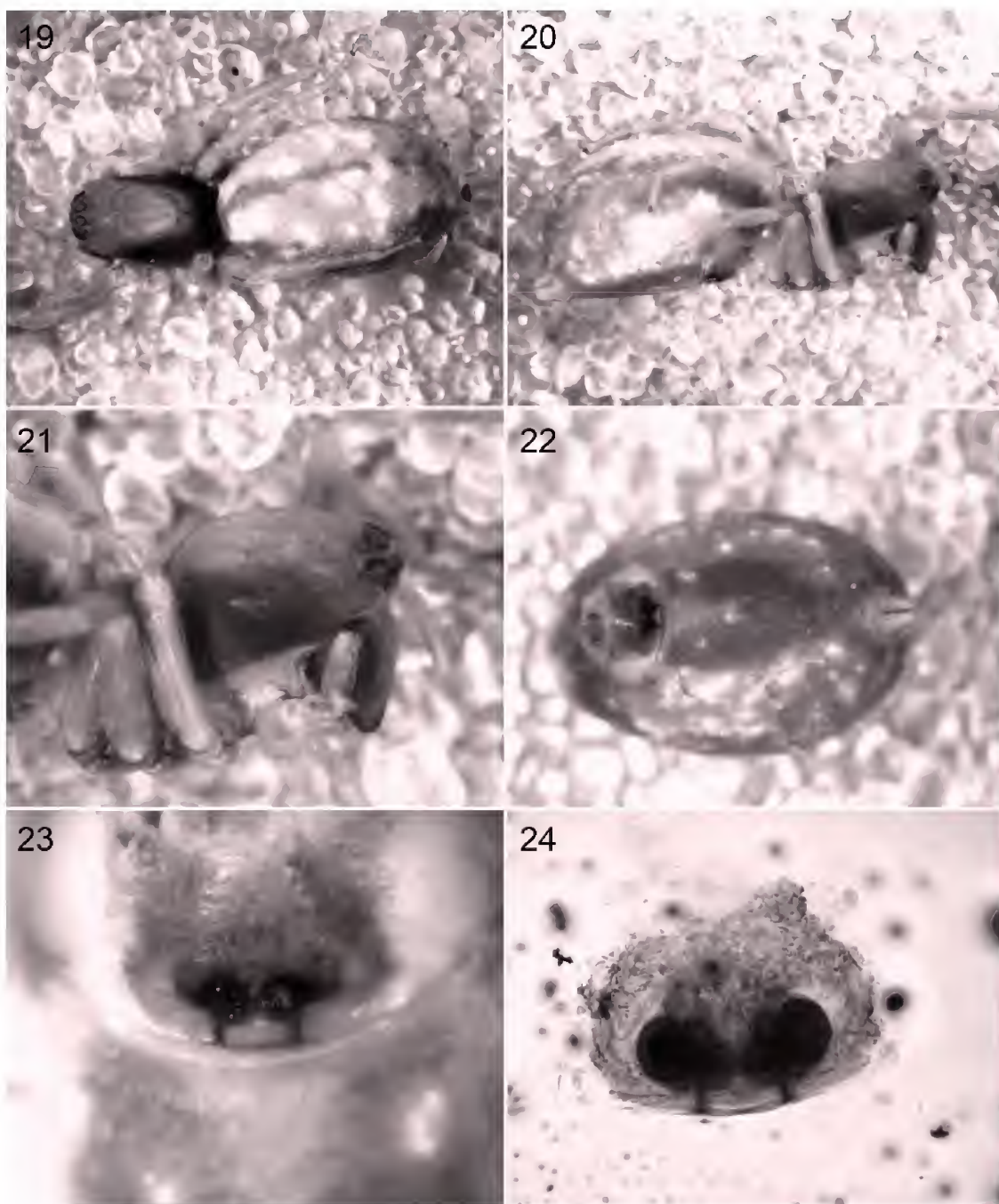
**FEMALE** (Palmas de Ocoa; figs. 26, 36, 37): Total length 5.57. Carapace 2.48 long, 1.50 wide. Femur II 1.22 long. Eye sizes and interdistances: AME 0.08, ALE 0.08, PME 0.10, PLE 0.14; AME-AME 0.05, AME-ALE 0.06, PME-PME 0.12, PME-PLE 0.16, ALE-PLE 0.05. Coloration as in male,



Figs. 13–18. *Platnickia elegans* (Nicolet), female from Palmas de Ocoa. **13.** Epigynum, ventral view (arrow: copulatory plug). **14.** Same, detail of copulatory opening. **15.** Epigynum, dorsal view. **16.** Same, detail of pores on the spermathecal head. **17.** Epigynum, anterodorsal view. **18.** Same, detail of dictynoid pore.

though lighter in general; cephalic area lighter than remainder of carapace, abdominal dorsal markings less profuse, dark pigment of venter restricted to two paraxial bands and semicircle in front of spinneret area. Leg spination: femora: I d1-1-1 (last one very thin), p1(sub-

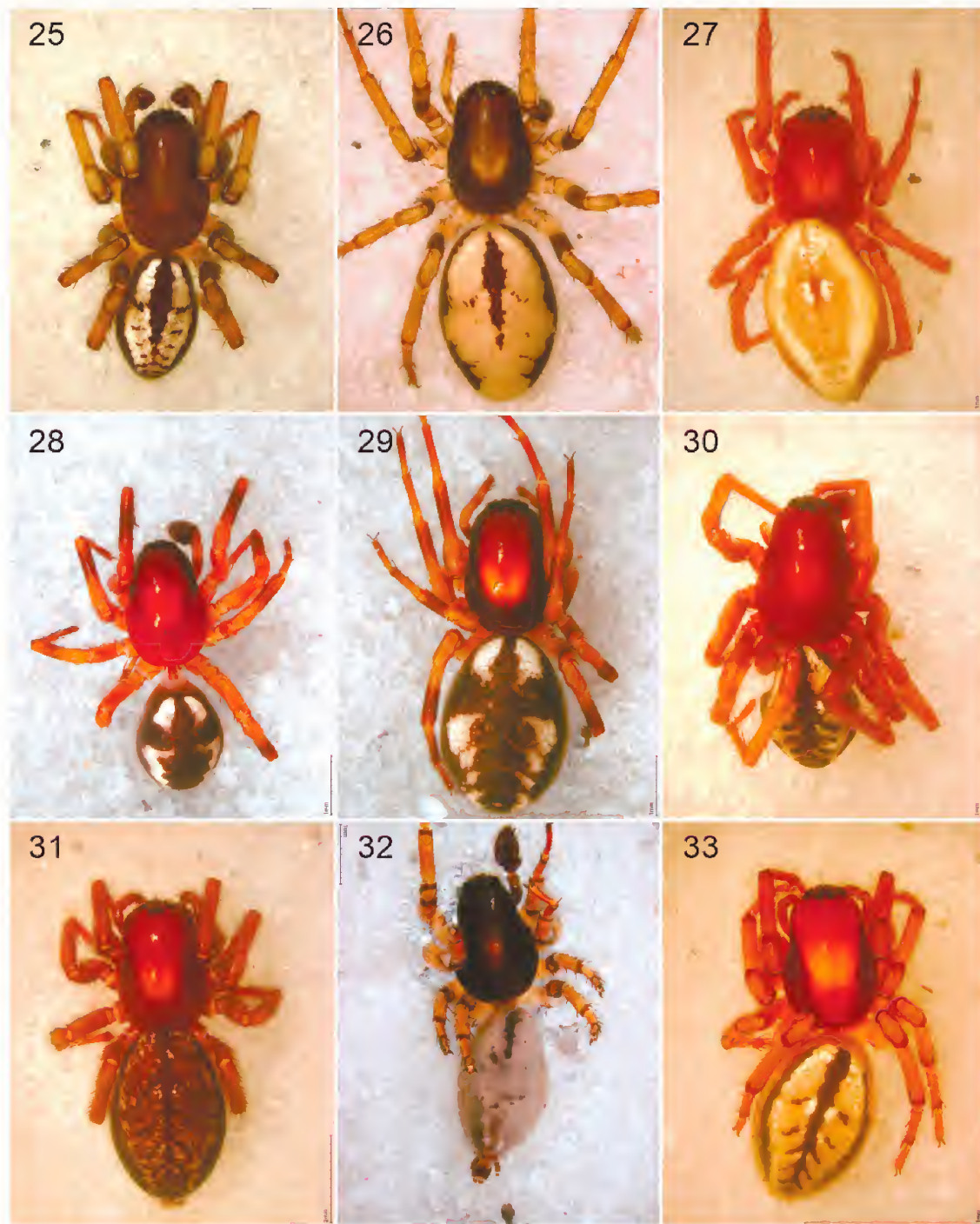
ap); II d1-1-1 (last one very thin), p1(subap); III d0/1-1-1, p1/2(subap), r0/1(subap); IV d1-1-1(last one very thin); tibiae: I v2(ap), p1(very thin)-0-0; II v1-1-2, p1-0-1; III p1-1, r1-1, v2-2-2; IV v1/2-1/2-2, r1-1, p0/1-1; metatarsi: I v0-2-2, p1(ap), r0/1(ap); II v1-2-



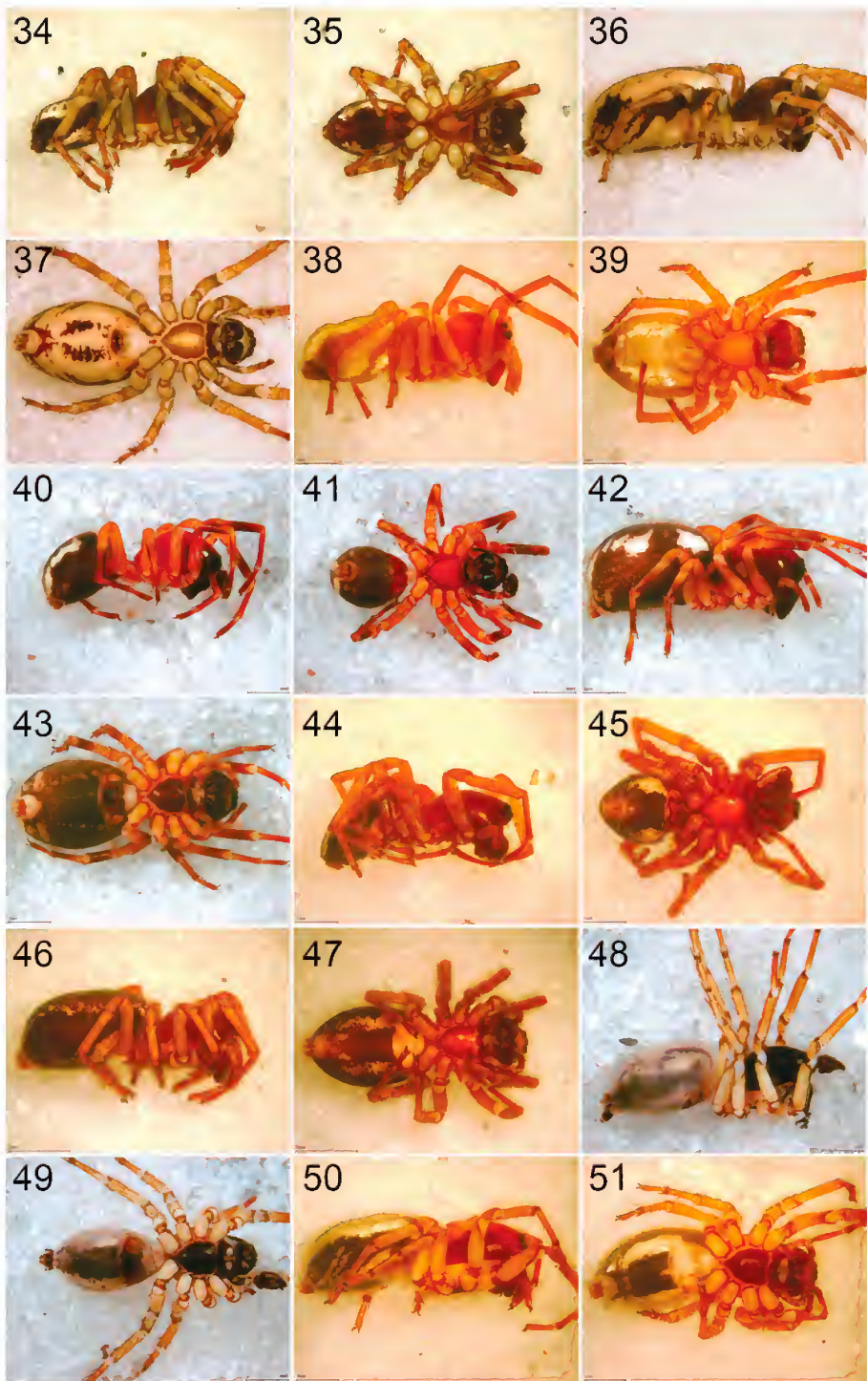
Figs. 19–24. *Platnickia elegans* (Nicolet), female holotype. 19. Habitus, dorsal view. 20. Same, lateral view. 21. Carapace, lateral view. 22. Abdomen, ventral view. 23. Epigynum, ventral view. 24. Same, cleared, dorsal view.

2, p2(ap); III r1-1-1, p0-1-1, v2-2-2; IV v1-1-1 (zigzagging) + 2(ap), r0-1-2, p0-1-1, dr1(ap), dr1(ap); tarsi: III vp0-0-1, vr0-0-1-1; IV vp0-0-0-1-1, vr0-1-1-1-1 (zigzagging), r1. Epigynum

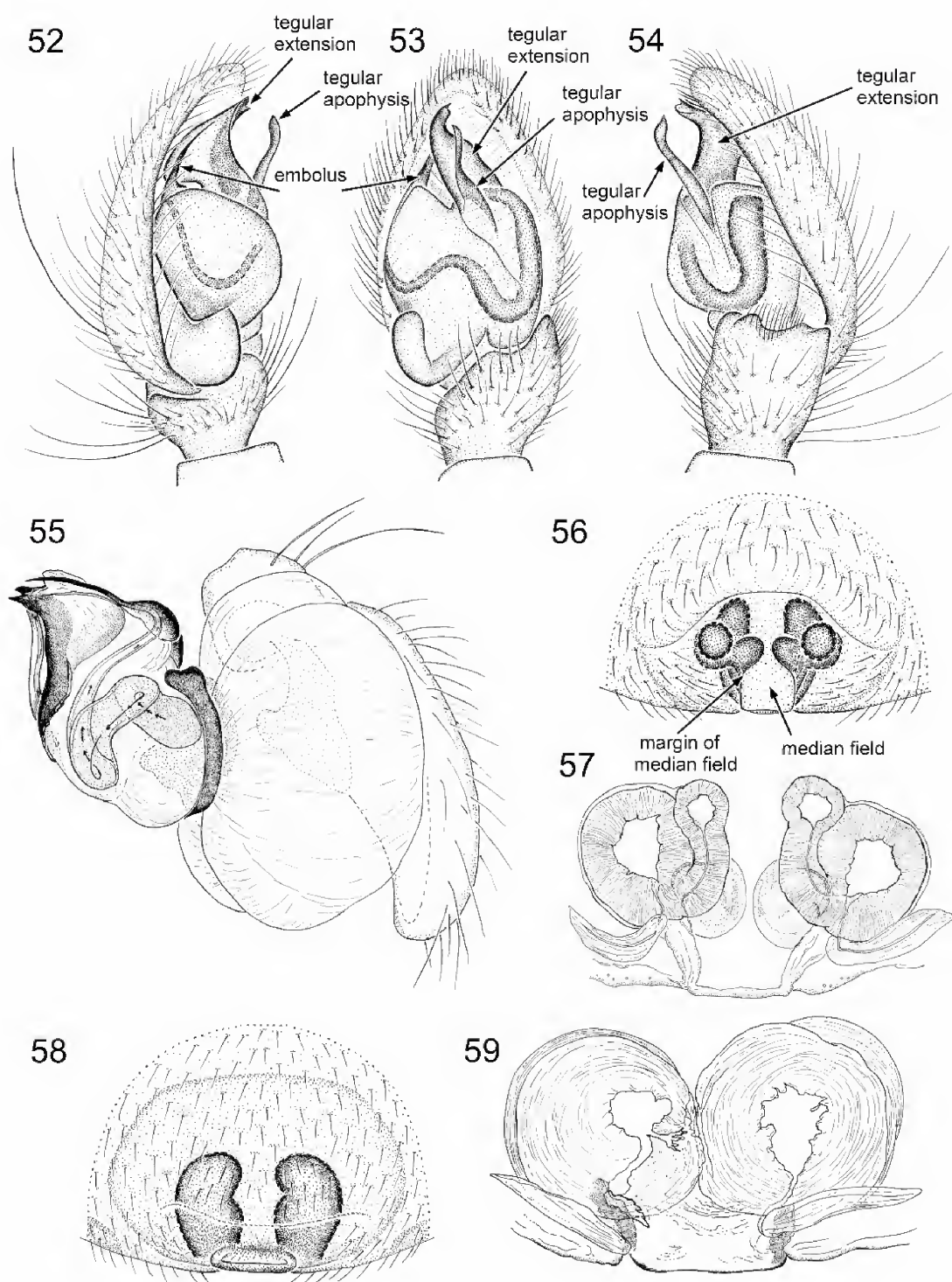
with more or less rectangular median field (fig. 56); paired copulatory openings with crestlike structures at inner corners (figs. 13, 14); two large, globose spermathecae, each



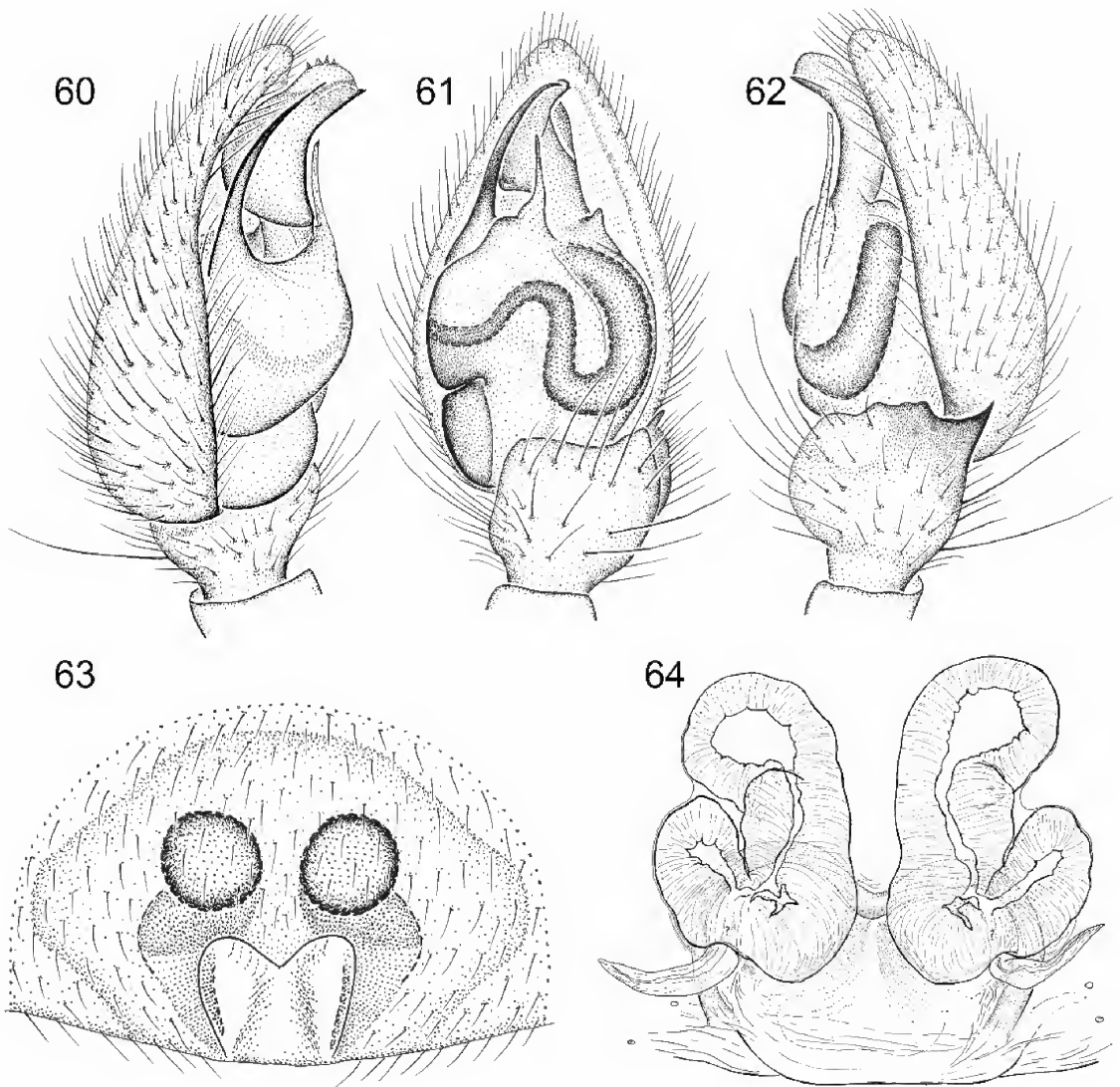
Figs. 25–33. Dorsal habitus of preserved specimens. 25, 28, 30, 32: Male. 26, 27, 29, 31, 33: Female. 25, 26. *P. elegans* (Nicolet). 27. *P. roble*, new species. 28, 29. *P. wedalen*, new species. 30, 31. *P. bergi* (Simon). 32, 33. *P. bolson*, new species.



Figs. 34–51. Habitus of preserved specimens. 34, 36, 38, 40, 42, 44, 46, 48, 50: Lateral view. 35, 37, 39, 41, 43, 45, 47, 49, 51: Ventral view. 34, 35, 40, 41, 44, 45, 48, 49: Male. 36–39, 42, 43, 46, 47, 50, 51: Female. 34–37. *P. elegans* (Nicolet). 38, 39. *P. roble*, new species. 40–43. *P. wedalen*, new species. 44–47. *P. bergi* (Simon). 48–51. *P. bolson*, new species.



Figs. 52–59. 52–57: *Platnickia elegans* (Nicolet). 58, 59: *P. roble*, new species. 52–55: Male. 56–59: Female. 52. Left palp, prolateral view. 53. Same, ventral view. 54. Same, retrolateral view. 55. Same, expanded. 56, 58. Epigynum, ventral view. 57, 59. Same, cleared, dorsal view.



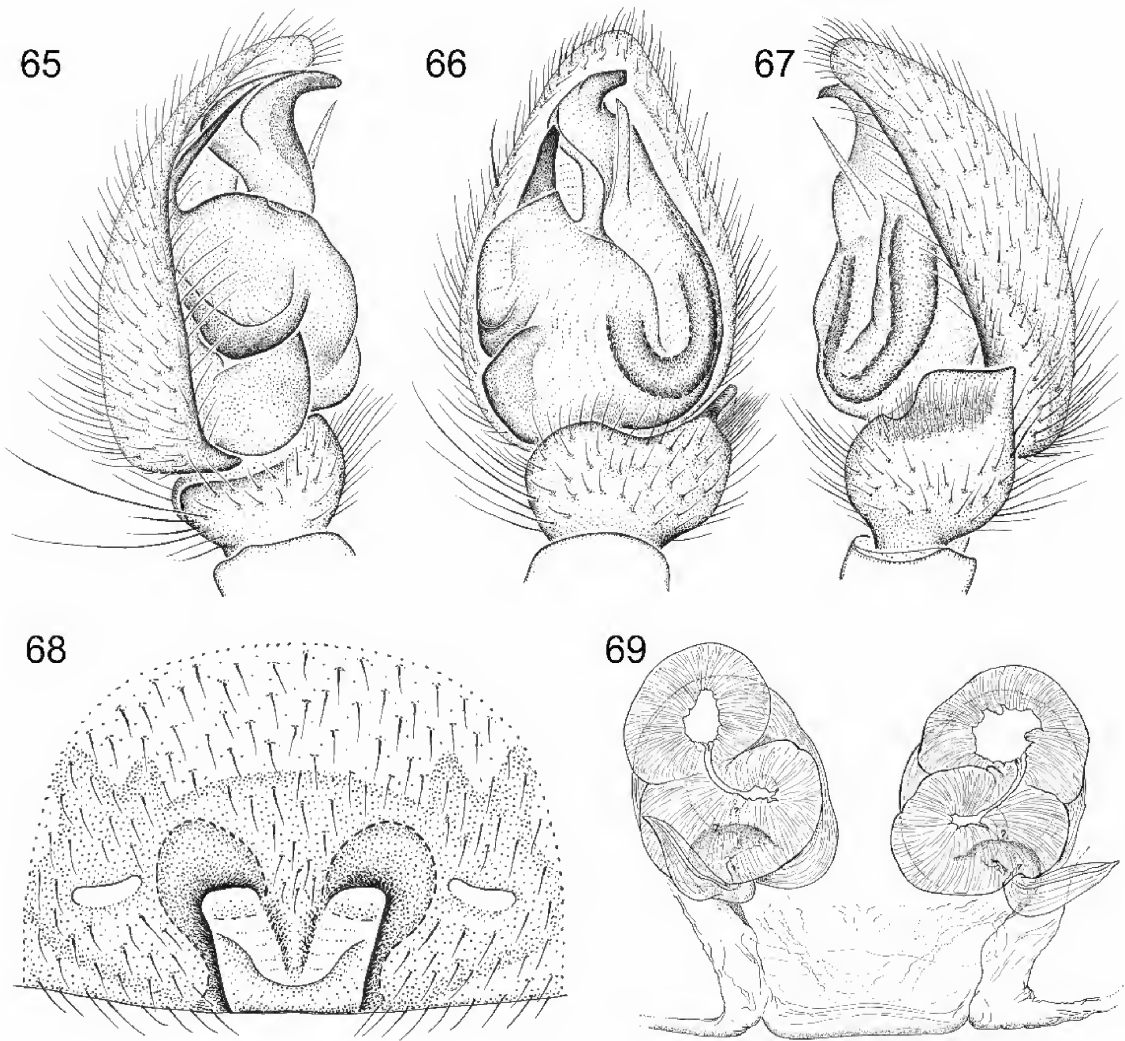
Figs. 60–64. *Platnickia wedalen*, new species. **60.** Left male palp, prolateral view. **61.** Same, ventral view. **62.** Same, retrolateral view. **63.** Epigynum, ventral view. **64.** Same, cleared, dorsal view.

with medially directed head (internally connected by relatively long stem, fig. 57).

**VARIATION:** The holotype (figs. 19–24) has the margins of the epigynum almost entirely parallel, delimiting an almost perfectly rectangular median field, but this shape varies among the specimens examined.

**MATERIAL EXAMINED:** CHILE: **Región de Coquimbo (IV): Choapa:** Céspedes, Illapel, Oct. 13–14, 1994, elev. 1100 m (L. Peña, AMNH), 4♀; El Bato, E Illapel, Oct. 10, 1985 (L. Peña, AMNH), 51♀, Oct. 11–13,

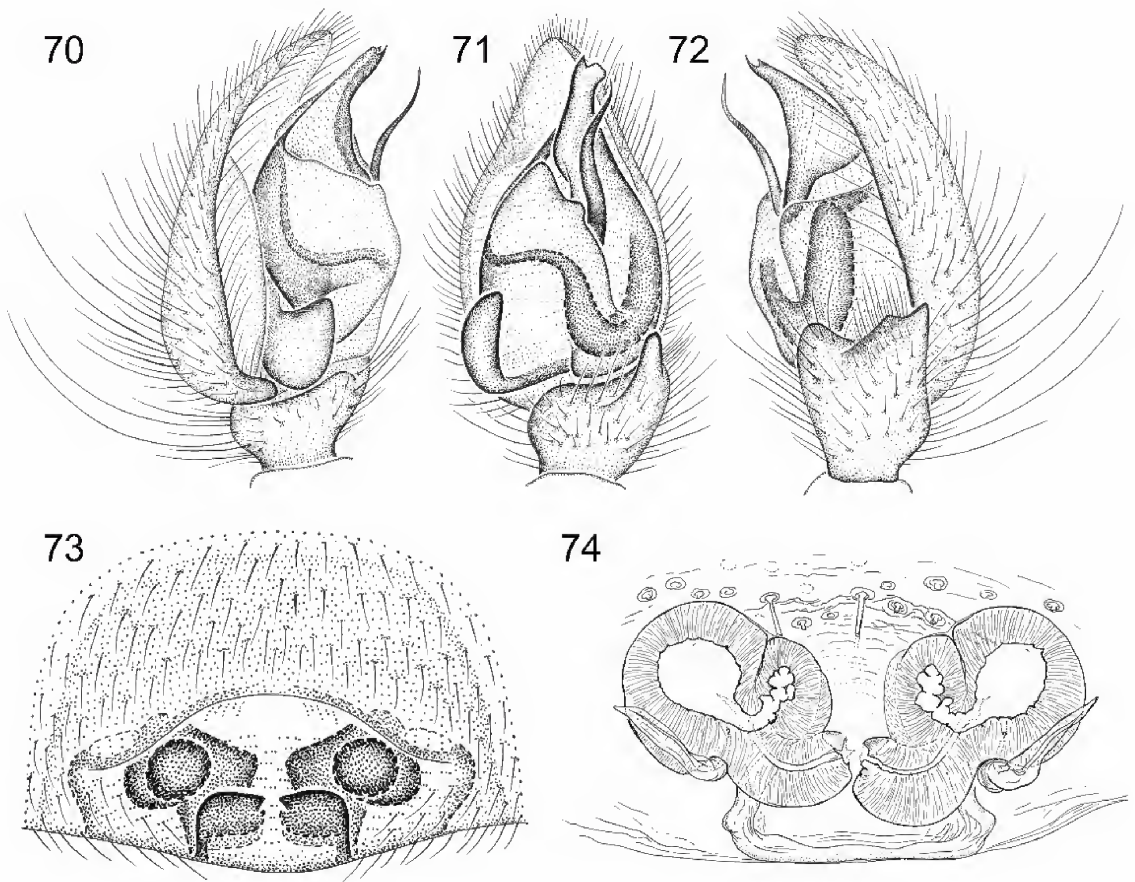
1994, elev. 800 m (L. Peña, AMNH), 1♀; Fundo Palo Colorado, 16 km N Pichidangui, Oct. 31, 1988 (E. Maury, C. Szumik, P. Goloboff, MACN), 1♀; N Los Villos, Oct. 3, 1990 (L. Peña, AMNH), 1♀. **Región de Valparaíso (V): Petorca:** La Ligua, Sept. 27, 1980, relict forest (L. Peña, AMNH), 4♀; Ñagué, route 5, km 235, 10 km N Los Vilos, 31°49'53.5"S, 71°30'34.2"W, Feb. 2005, coastal fog-fed forest, elev. 90 m (M. Ramírez, F. Labarque, MACN), 2♂ (1 sent to La Serena); Petorca, Oct. 8, 1986 (L. Peña, AMNH), 7♀;



Figs. 65–69. *Platnickia bergi* (Simon). 65. Left male palp, prolateral view. 66. Same, ventral view. 67. Same, retrolateral view. 68. Epigynum, ventral view. 69. Same, cleared, dorsal view.

Pullalli, Dec. 16, 1980 (L. Peña, AMNH), 1♀. **Quillota:** Parque Nacional La Campana, Palmas de Ocoa, 32°57'40.4"S, 71°03'34.0"W, Feb. 18, 2005, elev. 770 m (M. Ramírez, F. Labarque, MACN), 2♂, 1♀ (♀ matured in lab). **Valparaíso:** Cuesta El Melón, near La Calera, Nov. 15, 1985 (L. Peña, AMNH), 22♀, Oct. 10–12, 1986 (L. Peña, AMNH), 1♀. **Región Metropolitana de Santiago:** **Chacabuco:** Cuesta La Dormida, N Tiltill, Nov. 13–18, 1982, elev. 800–1300 m (L. Peña, AMNH), 12♀. **Santiago:** Quilicura, Aug. 1979 (L. Peña, AMNH), 12♀. **Maipo:** La Obra, cajón de Río Maipo, Nov. 1984 (G.

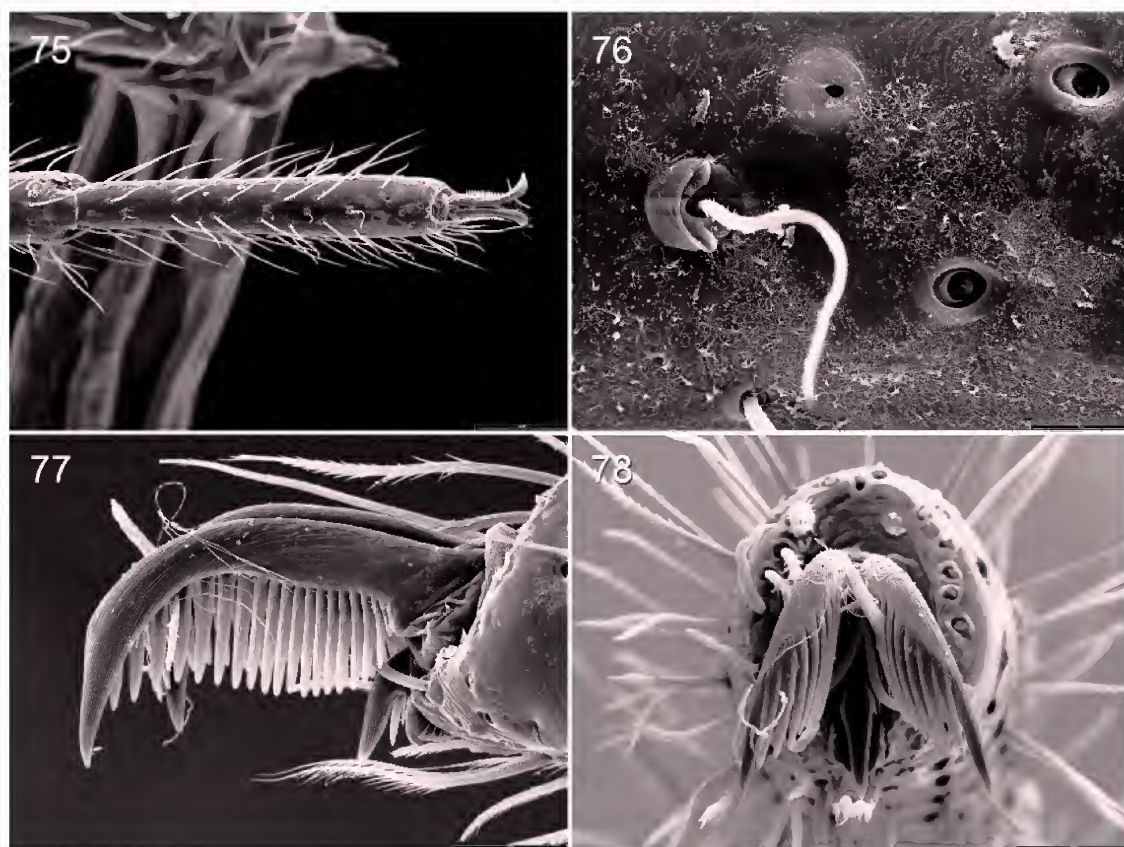
Arriagada, MNHNS), 1♀. **Región del O'Higgins (VI):** **Cachapoal:** Pilai, Nov. 23–25, 1981 (L. Peña, AMNH), 4♀. **Región del Maule (VII):** **Curicó:** Las Tablas, E Curicó, Feb. 1985 (L. Peña, AMNH), 52♂, 54♀. **Región del Bío-Bío (VIII):** **Ñuble:** Chillan, Las Trancas, Feb. 1987 (L. Peña, AMNH), 10♂, 4♀; El Llano, Chillan, Jan.–Mar. 1983 (L. Peña, AMNH), 1♂; Recinto, Jan. 9, 1989 (M. Ramírez, E. Maury, MACN), 2♀; E Recinto, Las Trancas, Feb. 1987, elev. 1100 m (L. Peña, AMNH), 5♂, 2♀. **Concepción:** Palo Grande, road to Santa Juana, Dec. 29, 1996 (T. Cekalovic, AMNH), 1♀; Periquillo, Oct.



Figs. 70–74. *Platnickia bolson*, new species. 70. Left male palp, prolateral view. 71. Same, ventral view. 72. Same, retrolateral view. 73. Epigynum, ventral view. 74. Same, cleared, dorsal view.

17, 1992 (T. Cekalovic, AMNH), 1♀. **Bío-Bío:** El Manzano, near Contulmo, Dec. 15, 1985 (L. Peña, AMNH), 1♂; W Ralco, Santa Bárbara, Nov. 22–23, 1994, elev. 400 m (L. Peña, AMNH), 1♀. **Arauco:** 2 km S crossroad to Colico Norte, Oct. 20, 1996 (T. Cekalovic, AMNH), 3♀. **Región de La Araucanía (IX):** **Malleco:** Alto Caledonia, E Mulchen, Feb. 10–15, 1981, elev. 700 m (L. Peña, AMNH), 1♂, Feb. 14, 1992, elev. 740 m (N. Platnick, P. Goloboff, M. Ramírez, AMNH), 1♂, 3♀; 16 km N Curacautín, Feb. 15, 1992, elev. 800 m (N. Platnick, P. Goloboff, M. Ramírez, AMNH), 5♂, 1♀; Malalcahuello, Dec. 9–15, 1985 (L. Peña, AMNH), 1♂, 6♀; Monumento Nacional Contulmo, Jan. 12, 1989 (M. Ramírez, MACN), 1♀, Jan. 17, 1989, in armpits of colihue (*Chusquea* sp.) bamboo (M. Ramírez, MACN, sent to La Serena), 1♀;

Parque Nacional Nahuelbuta, 40 km W Angol, Feb. 13, 1992, elev. 1200 m (N. Platnick, P. Goloboff, M. Ramírez, AMNH), 1♂, 37♀, 37°49'39.0"S, 73°00'32.2"W, Feb. 12, 2005, *Nothofagus/Araucaria* forest, elev. 1100 m (M. Ramírez, F. Labarque, MACN), 5♂, 1♀ (including MACN ARAMR000224, 1♂, and MACN 10946, voucher for P. Michalik study, 1♂); Tolhuaca, Mar. 15–23, 1986 (L. Peña, AMNH), 1♀; Victoria, Nov. 26–29, 1990 (L. Peña, AMNH), 1♀. **Cautín:** 15–30 km S Cherquenco, Feb. 26, 1989 (L. Peña, AMNH), 1♂; Loncoche (G. Mann, MNHNS), 1♂; Quiñenahuin, N Curarrehue, Mar. 7–10, 1989, elev. 600 m (L. Peña, AMNH), 1♂. **Región de los Lagos (X):** **Valdivia:** Purolón, NW Panguipulli, Jan. 10, 1985 (L. Peña, AMNH), 1♀. **Chiloé:** Piopío, Mar. 10–12, 1987 (L. Peña, AMNH), 1♂.



Figs. 75–78. *Platnickia elegans* (Nicolet), female, left leg I. 75. Tarsus, dorsal view. 76. Same, showing trichobothrium and tarsal organ. 77. Tarsal claws, retrolateral view. 78. Same, distal view.

ARGENTINA: **Neuquén:** Hua-Hum, Jan. 1985 (M. Ramírez, MACN), 1♀; Lago Huechulafquen, Jan. 20–23, 1999 (L. Compagnucci, MACN), 1♀; Lago Paimún, Parque Nacional Lanín, Jan. 15–17, 1999 (L. Compagnucci, MACN), 1♀; Pucará, Feb. 1963 (Schajovsky, MACN), 2♂, 4♀, Dec. 15, 1965 (Giai, MACN), 1♂, 7♀, 1973 (Schajovsky, MACN), 1♂, Feb. 1974 (Schajovsky, MACN), 2♂, 1♀.

DISTRIBUTION: Chile (Choapa to Chiloé) and adjacent Argentina (Neuquén and Río Negro, map 1).

*Platnickia roble*, new species

Figures 27, 38, 39, 58, 59

TYPE: Female holotype taken at an elevation of 1100 m at El Roble, Ñuble, Región del

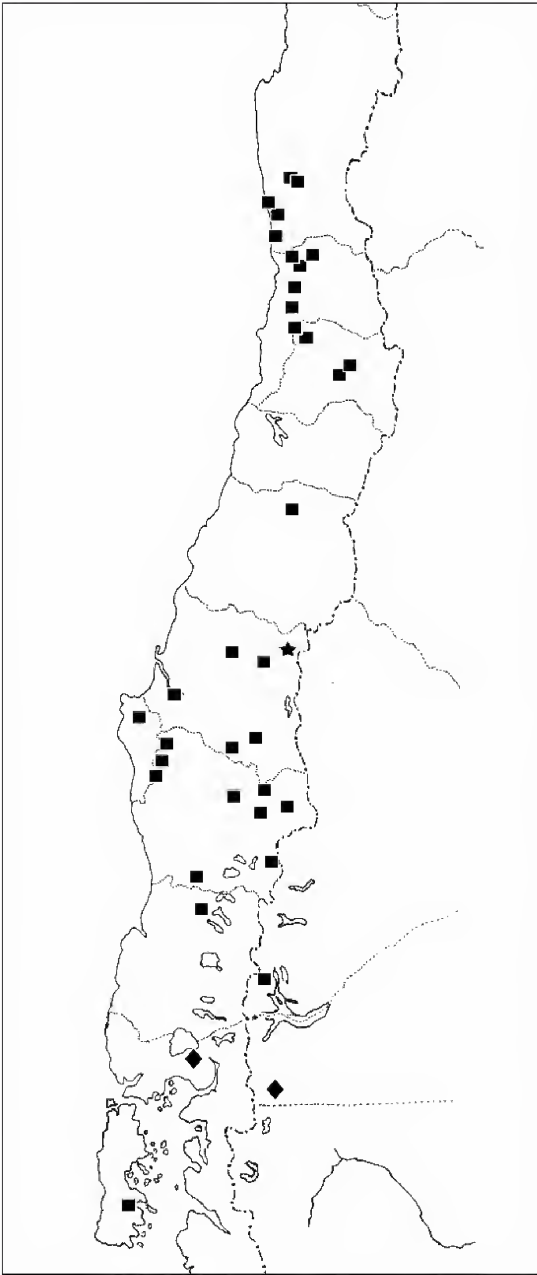
Bío-Bío (VIII), Chile (Oct. 5–7, 1992; L. Peña), deposited in AMNH.

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: Females can easily be distinguished by the short, transverse epigynal median field and the rounded, simple spermathecae (figs. 58, 59).

MALE: Unknown.

FEMALE (holotype, figs. 27, 38, 39): Total length 5.01. Carapace 2.20 long, 1.60 wide. Femur II 1.38 long. Eye sizes and interdistances: AME 0.12, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.06, AME-ALE 0.04, PME-PME 0.06, PME-PL 0.16, ALE-PL 0.02. Carapace orange brown, with lighter area in front of fovea; legs, endites uniformly orange brown; sternum, chelicerae slightly darker; abdominal dorsum white with cream, oval cardiac band (darkened at middle, with



Map 1. Southern Chile and adjacent Argentina, showing records of *Platnickia elegans* (squares), *P. roble* (star), and *P. bolson* (diamonds).

two white spots), sides, venter cream, except for two paraxial white bands and dark grey mark around spinnerets. Leg spination: femora: I d1-1-1, p1(subap); II d1-1-1; III d1(subap); IV d1(subprox); tibiae: I p1-1, v2(ap); II p11, v2(ap); III d1-1(last one very

thin), p1-1, r1-1, vp0-1-1(ap), vr1(ap); IV d1-1 (last one very thin), p1-1, r1-1, vp1-1-1(ap), vr1(ap); metatarsi: I p1(ap), v2(ap); II r1(ap), p2(ap), vp0-1-1(ap), vr0-1-1(ap); III v0-2-2(ap), p0-1-1(subap), dr0-1-1(ap); IV dp1(very thin)-1-1(subap), dr0-1-1, v0-2-2(ap), p1(ap), r1(ap); tarsi: III vr0-0-1-1, vp0-0-1; IV vr0-1-1-1, vp0-0-0-1. Epigynum with short, transverse median field (fig. 58); spermathecae globose, apparently simple (fig. 59).

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Known only from the type locality in central Chile (map 1).

*Platnickia wedalen*, new species

Figures 28, 29, 40–43, 60–64

*Storena bergi* (misidentification): Schiapelli and Gerschman de Pikelin, 1974: 85, figs. 15–17 (male only; female is correctly identified).

TYPES: Male holotype and female allotype (together with one male and three female paratypes) taken at an elevation of 17 m at Chepu, Chiloé, Región de Los Lagos (X), Chile (Nov. 29, 1981; N. Platnick, R. Schuh), deposited in AMNH.

ETYMOLOGY: The specific name is from the Mapuche word “wëdalen”, meaning “to be separated or isolated from”, and refers to the large gap between the two known populations of this species, in the southern Andean forests and on the Falkland Islands.

DIAGNOSIS: Males resemble those of *P. bergi* in having a membranous tegular apophysis, but in this species the apophysis is slightly longer and runs closely parallel to the ventral surface of the tegular extension, which has a dorsal denticulate keel (figs. 60–62); the retrolateral tibial apophysis has a very acute tip. Females are also very similar to those of *P. bergi* but have more rounded anterolateral margins on the epigynal median field and more elongated spermathecae (figs. 63, 64). Both sexes show reduced spination on all the legs.

MALE (holotype, figs. 28, 40, 41): Total length 4.28. Carapace 2.14 long, 1.34 wide. Femur II 1.14 long. Eye sizes and interdistances: AME 0.08, ALE 0.06, PME 0.08, PLE 0.06; AME-AME 0.08, AME-ALE 0.02, PME-PME 0.08, PME-PLE 0.12, ALE-PLE

0.06. Carapace red, except frontal, anterolateral areas almost black; chelicerae, endites brown; sternum reddish brown; legs orangish brown, with darkened median bands on tibiae; metatarsi, tarsi slightly darkened; abdominal dorsum dark brown, with two consecutive lateral white bands (posterior pair more elongated, sinuous), sides, venter uniformly dark brown except for few small posterolateral creamy dots. Leg spination: femora: I d1-1-1(ap); II d1-1-1(ap); III d1(ap); IV d1-0-1(ap); tibiae: I vr1-1-0, p1/0-1/0; II vr1-1-0; III vp1-1-0-1; IV vp1-1-0-1, r1-1; metatarsi: I v2(ap); II v0-2-2(ap), p1(ap), r1(ap); III vp1-1-0-1(ap), p1(ap), dp0-1/0-1(ap), vr1(ap), r1(ap), dr1(ap); IV dp1(ap), p1(ap), vp1-1-0-1(ap), dr0-1-1(ap), r0-1-1(ap), vr0-1-1(ap); tarsi: III vr0-0-0-1, vp0-1; IV vr0-0-1-1-1, vp0-0-0-1-1. Palp as in figs. 60–62.

**FEMALE** (allotype, figs. 29, 42, 43): Total length 5.33. Carapace 2.30 long, 1.50 wide. Femur II 1.20 long. Eye sizes and interdistances: AME 0.08, ALE 0.10, PME 0.12, PLE 0.08; AME-AME 0.04, AME-ALE 0.04, PME-PME 0.08, PME-PL 0.18, ALE-PL 0.04. Carapace brown with reddish cephalic area; sternum, mouthparts dark brown; coxae yellowish brown, remaining podomeres yellowish brown proximally, brown distally (except tarsi entirely brown); abdominal coloration as in male, except posterior dorsal bands replaced by consecutive, irregular, creamy spots, reduced in size toward caudal area; thin creamy lines connect each spot with corresponding spot on opposite side; lateral, ventral small dots more abundant than in male, most ventral dots arranged in paraxial lines; spinnerets light brown. Leg spination: femora: I d1-0-1(all thin); II d1-0-1 (all thin); III d1(subap); IV d1-0-1 (all very thin); tibiae: I vr1(subprox); II vr1(subprox); IV vp1-1-0; metatarsi: I v2(ap); II v2(ap); III p1(ap), vp0-1-1(ap), vr1(ap), r1(ap), dr1(ap); IV pv1(ap), vp0-1-1(ap), vr0-0-1(ap), r1(ap); tarsi: III vr0-0-1-1-1, vp0-0-1-0; IV vr0-0-1-1-1, vp0-0-1-1. Epigynum with more or less heart-shaped median field (fig. 63); spermathecae elongated, with medial lobes (heads) larger than laterals (fig. 64).

**VARIATION:** Some females have two additional ventral spines on metatarsi I and/or II. The form of the white dorsal abdominal

marking varies from elongate longitudinal bands to series of consecutive spots.

**OTHER MATERIAL EXAMINED:** **CHILE: Región de la Araucanía (IX): Cautín:** Bellavista, N shore Lago Villarrica, Dec. 15–30, 1982, window trap, Valdivian rainforest, elev. 310 m (A. Newton, M. Thayer, AMNH), 1♀; Flor del Lago, 15 km NE Villarrica, Dec. 14, 1984–Feb. 10, 1985, flight intercept trap, *Nothofagus* forest, elev. 300 m (S., J. Peck, AMNH), 2♂. **Región de los Lagos (X): Valdivia:** 4.1 km W Anticura, Dec. 19–25, 1982, window trap, Valdivian rainforest, elev. 270 m (A. Newton, M. Thayer, AMNH), 2♂. **Llanquihue:** 10–14 km E Correntoso, Feb. 3, 1985, Berlese, concentrated moss, disturbed forest, elev. 305 m (N. Platnick, O. Francke, AMNH), 1♂, 2♀; 7 km N Ensenada, Nov. 26, 1981, concentrated moss, litter, elev. 400 m (N. Platnick, R. Schuh, AMNH), 1♀. **Chiloé:** 5 km N Quellón, Dec. 1, 1981, elev. 107 m (N. Platnick, R. Schuh, AMNH), 1♀. **Palena:** 25–27 km N Chaitén, Jan. 17, 1986, Berlese, moss, wet virgin forest, elev. 40 m (N. Platnick, P. Goloboff, R. Schuh, AMNH), 2♀. **Región Aisén (XI): Aisén:** 30 km N Puyuhuapi, Jan. 29, 1985, sifted moss on logs, elev. 100 m (S., J. Peck, AMNH), 1♀. **ARGENTINA: Río Negro:** Parque Nacional Nahuel Huapi, Puerto Blest, Jan. 7–20, 2000, sifting humus (L. Lopardo, A. Quaglini, MACN), 1♀. **FALKLAND ISLANDS: East Falkland:** Murrell Valley, Dec. 3, 1974 (S. Coscarón, AMNH), 1♂; “Fitz Roy Stanley”, Feb. 1971 (M. Rumboll, MACN 6669), 1♂ (not ♀).

**DISTRIBUTION:** Chile (Cautín to Aisén), Argentina (Río Negro), and the Falkland Islands (where the species is apparently sympatric with *P. bergi*, map 2).

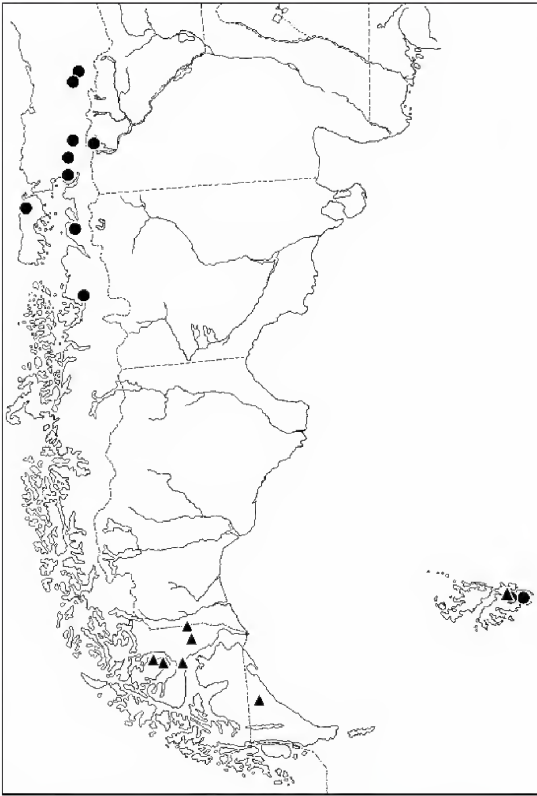
*Platnickia bergi* (Simon)

Figures 30, 31, 44–47, 65–69

*Storena bergi* Simon, 1895: 169 (male and female syntypes from “Terre-de-Feu” in MNHN, not examined); Schiapelli and Gerschman de Pikelin, 1974: 85, figs. 13a, 14 (female only).

*Platnickia bergi*: Jocqué, 1991: 75.

**DIAGNOSIS:** Males resemble those of *P. wedalen* in having a membranous tegular apophysis, but in this species the apophysis



Map 2. Southern South America, showing records of *Platnickia wedalen* (circles) and *P. bergi* (triangles).

is slightly shorter and ventrally directed, separated from the ventral surface of the tegular extension (figs. 65–67); the retrolateral tibial apophysis also has a less acute tip. Females also resemble those of *P. wedalen* but have straight, more parallel margins on the epigynal median field and more rounded spermathecae (figs. 68, 69). This is also the largest species in the genus.

**MALE** (Magallanes, Isla Riesco, figs. 30, 44, 45): Total length 4.78. Carapace 2.92 long, 1.72 wide. Femur II 1.36 long. Eye sizes and interdistances: AME 0.04, ALE 0.07, PME 0.08, PLE 0.10; AME-AME 0.03, AME-ALE 0.07, PME-PME 0.12, PME-PLE 0.22, ALE-PLE 0.12. Carapace reddish brown, slightly lighter in front of fovea; legs, sternum uniformly reddish brown, chelicerae, endites darker; abdominal dorsum similar to that of *P. elegans* but with transverse bands wider, all touching cardiac stripe. Leg spination: femora: I d1-1-1, p1 (subap); II d1-1-1, p1(subap); III d0-1-1, dp0-

1-1, dr0-0-1; IV d1-1-0-1-0-1, dr1(ap), dp1(ap); tibiae: I vp0-1-1(ap), vr1-1-1(ap), p1-1; II vp0-1-1(ap), vr1-1/0-1-1(ap), p1-1; III dp1(subap), d1-1-0, dr1-1; IV d1-1-0, p1-0, r1-1, vp1-1-1-0-0-1(ap), vr1-1-0-1(ap); metatarsi: I v0-2-2(ap), p1(ap); II v2-2-0-2-2(ap), p1(ap), r0-1/0-1(ap); III v2-2-0-2(ap) p1-1-1(ap), dp1(ap), dr0-1-1(ap); IV r1-1(ap), dr1-0-1(ap), p1-1(ap), v2-2-2(ap), dp1-0-1(ap); tarsi: III vr0-0-1, vp0-0-1-1; IV vp0-0-0-0-1-1, vr0-0-1-1-1. Palp as in figs. 65–67.

**FEMALE** (Magallanes, Gallegos Chico, figs. 31, 46, 47): Total length 6.70. Carapace 3.20 long, 2.04 wide. Femur II 1.76 long. Eye sizes and interdistances: AME 0.08, ALE 0.10, PME 0.11, PLE 0.14; AME-AME 0.03, AME-ALE 0.06, PME-PME 0.08, PME-PLE 0.22, ALE-PLE 0.06. Coloration largely as in male, but slightly darker, abdominal dorsum with marbled rather than white background. Leg spination: femora: I d1-1-1(last one very thin), p1(subap); II d1-1-0/1 (last one very thin), p1(subap); III d1(subap); IV d1-0-1; tibiae: I vr1-1-1(ap), vp1(ap), p1(subap); III dp1-0-0, dr1-1-0, p1-1, vr1-1-1(ap), vr0-1-1(ap); IV p1-1, r1-1, vp1-1/0-1(ap), vr1(ap); metatarsi: I vp1(ap), vr0-1/0-1(ap); II vr1-1-0-1(ap), vp0-1-1(ap); III dr0-1-1(ap), dp1(ap), r1(ap), p0-1-1(ap), v2-2-2(ap); IV d0-1-1(ap), dr0-0-1(ap), dr0-1-1(ap), r1(ap), vr1-1-1(ap), vr0-1-1(ap); tarsi: III vp0-0-1, 0-0-1-1; IV vr0-0-1-1, vp0-0-0-1-1. Spermathecae each with two receptacles, arranged longitudinally rather than transversely (figs. 68, 69).

**VARIATION:** The extent of the white pigment cover on the abdominal dorsum varies among specimens.

**MATERIAL EXAMINED:** **CHILE: Región de Magallanes (XII):** *Magallanes:* Estancia Gazy Harbour, Feb. 10, 1990 (T. Cekalovic, AMNH), 1♂; Estancia Virgen de Lourdes, Sector Dinamarmero, Feb. 6, 1990 (S. Cekalovic, AMNH), 1♀; *Gallegos Chico,* Feb. 8, 1990 (T. Cekalovic, AMNH), 2♀, Feb. 10, 1990 (S. Cekalovic, AMNH), 1♀; *Posomby, Isla Riesco,* Jan. 31, 1976 (T. Cekalovic, AMNH), 1♂; 27 km N Punta Arenas, Nov. 27, 1966, *Nothofagus* forest, elev. 30 m (E. Schlinger, M. Irwin, CAS), 1♀. **ARGENTINA: Tierra del Fuego:** Sección Despedida, Apr. 1967 (E. Massoia, MACN), 2♀. **FALKLAND ISLANDS: East Falkland:**

"Fitz Roy Stanley", Feb. 1971 (M. Rumboll, MACN 6669), 1♀ (not ♂).

**DISTRIBUTION:** Known only from the far southern tip of South America, in Chile (Magallanes), Argentina (Tierra del Fuego), and the Falkland Islands (where the species is apparently sympatric with *P. wedalen*, map 2).

***Platnickia bolson*, new species**

Figures 32, 33, 48–51, 70–74

**TYPE:** Male holotype taken in a pitfall trap in a cypress forest in the Reserva Forestal Loma del Medio, El Bolsón, Río Negro, Argentina (Feb. 2004; P. Sackmann), deposited in MACN.

**ETYMOLOGY:** The specific name is a noun in apposition taken from the type locality.

**DIAGNOSIS:** Males resemble those of *P. elegans* in having a well-sclerotized tegular apophysis (figs. 70–72), but differ in having that apophysis thinner, slightly longer, and more sinuous, and in the tegular extension, which is proportionately longer; the retro-lateral tibial apophysis is also more acute and projecting. Females can be distinguished by the transverse, rectangular median field of the epigynum, the shorter spermathecae, the closely spaced copulatory openings, and the long, thick copulatory ducts (figs. 73, 74).

**MALE** (holotype; figs. 32, 48, 49): Total length 4.25. Carapace 2.47 long, 1.62 wide. Femur II 1.74 long. Eye sizes and interdistances: AME 0.06, ALE 0.07, PME 0.05, PLE 0.08; AME-AME 0.08, AME-ALE 0.03, PME-PME 0.12, PME-PLE 0.11, ALE-PLE 0.04. Carapace uniform dark brown, except for small lighter mark in front of fovea; legs yellowish, with distal podomeres slightly darker, bearing distal dark rings; chelicerae, endites, sternum dark brown; abdomen in poor condition (damaged by pitfall trap preservative), but apparently with markings similar to those of *P. elegans*. Leg spination: femora: I d1-1-1, p1(subap); II d1-1-1, p1(subap); III d0-0-0-1-1, dp0-0-1-1-1, dr0-0-1-1-1; IV d1-1-1, p1(subap), r1(subap); tibiae: I p1/0-0-0; II vr1-1-0, p1/0-0-0; III v2-2-2(ap), dr1-1, dp1-1; IV vr0-1-1(ap), vp1-1-1(ap), dp1-0, dr1-1; metatarsi: I v2(ap), p1(ap); II v2(ap), p1(ap); III v0-2-2(ap), p0-0-1(ap), r0-0-1(ap), dr0-1-1(ap), dp0-0-1(ap); IV vp1-1-1(ap), vr0-

1-1(ap), p1(ap), r1(ap), dp1(ap), dr0-1-1(ap); tarsi: III vp0-0-1-1, vr0-0-1-1-1; IV 1(subap), vr0-0-1-1. Palp as in figs 70–72.

**FEMALE** (El Bolsón; figs. 33, 50, 51): Total length 5.49. Carapace 2.36 long, 1.58 wide. Femur II 1.26 long. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.12, PLE 0.12; AME-AME 0.04, AME-ALE 0.02, PME-PME 0.12, PME-PLE 0.18, ALE-PLE 0.04. Carapace reddish brown, lighter in cephalic, postfoveal areas; endites, sternum dark brown; chelicerae orange brown; legs yellowish, with all podomeres apically darkened; abdomen as in *P. elegans*. Leg spination: femora: I d1-1-1, p1(subap); II d1-1-1, p1(subap); III d1(ap); IV d1-1-1; tibiae: I p1-0; II p0-1, vp0-0-1(ap), vr1-1-1(ap); III v2-2-2(ap), p1-1, r1-1; IV vp1-1-1(ap), vr0-1-1(ap), r1-1, d1(subprox); metatarsi: I v2(ap), p1(ap); II vr0-1-1(ap), vp1(ap), p1(ap); III rv0-0-1(ap), pv0-1-1(ap), v0-2-2(ap); IV v0-2-2-2(ap), p1(ap), r1(ap), dr0-1-1(ap), dp0-1-1(ap); tarsi: III vp0-0-1, vr0-0-1-1; IV vp0-1-1, vr0-0-1. Spermathecae with heads shorter than in *P. elegans*, copulatory openings more closely spaced (figs. 73, 74).

**OTHER MATERIAL EXAMINED:** CHILE: **Región de los Lagos (X): Llanquihue:** Río Blanco, Sector Chago, Puerto Montt, Jan. 30–Feb. 15, 1983 (G. Arriagada, MNHNS), 1♀. ARGENTINA: **Río Negro:** same locality as holotype, Feb. 2002 (P. Sackmann, MACN), 2♂, Apr. 2002 (P. Sackman, MACN), 1♂ (paratype); El Bolsón, Oct. 26, 1961 (A. Kovacs, AMNH), 2♀.

**DISTRIBUTION:** Southern Chile (Llanquihue) and adjacent Argentina (Río Negro, map 1).

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